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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,242	03/27/2001	Ricardo Cozar	Q63781	8040

7590 10/02/2002  
SUGHRUE, MION, ZINN  
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EXAMINER

COLON, GERMAN

ART UNIT PAPER NUMBER

2879

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/817,242		COZAR ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	German Colón		2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Specification*

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

The examiner notes that the headings for the different sections in the application are missing. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation "temperature T<sub>1</sub> is less than 350°C", and the claim also recites "preferably less than 300°C" which is the narrower statement of the range/limitation.

Regarding claims 2-5 and 8, claims 2-5 and 8 are rejected over the reasons stated in the rejection of claim 1 because of their dependency status from claim 1.

Art Unit: 2879

Regarding claim 6, claim 6 recites the limitation "the Fe-Ni alloy" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Referring to claim 7, claim 7 recites the limitation "the Fe-Ni alloy" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-8 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,420,054. Although the conflicting claims are not identical, they are not patentably distinct from each other for the following reasons:

US Application SN 09/817242	US Patent No. 6,420,054	Reasons for rejecting under obviousness-type double patenting
Claim 1	Claim 2 in view of claim 7	Same subject matter. Patent '054 claims a masking device for a flat screen colour-display CRT, comprising a support frame for a tensioned shadow mask and a tensioned shadow mask mounted on the support frame as to be subjected to tension at room temperature, characterized in that:  the support frame is made of a hardened Fe-Ni alloy having a

		<p>thermal expansion coefficient between 20°C and 150°C of less than <math>5 \times 10^{-6} \text{ K}^{-1}</math> and a yield stress <math>R_{p0.2}</math> at 20°C of greater than 700 MPa;</p> <p>the tensioned shadow mask is made of an Fe-Ni alloy having a thermal expansion coefficient between 20°C and 150°C of less than <math>5 \times 10^{-6} \text{ K}^{-1}</math>.</p> <p>Claim 2 claims a support frame for a tensioned mask but it fails to claim the tensioned focus mask with specific composition ranges. However, claim 7 claims a tensioned focus mask with specific composition ranges. The examiner notes that a CRT is well known to provide a shadow mask in order to focus and direct the electron beams into a specific section of the phosphor screen and the composition of the materials used for the mask are considered in order to improve structural features of the shadow mask such as strength and thermal expansion. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a CRT with a shadow mask with the purpose of focusing and directing the electron beams into a specific section of the phosphor screen and to provide a structure with improved structure properties such as strength and thermal expansion.</p> <p>The examiner further notes that the applicant claims some properties of the Fe-Ni alloy. Limitations directed to a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. Further, products of identical chemical composition can not have mutually exclusive properties. A chemical composition and its properties are inseparable. Thereof, since the Patent '054 teaches the identical chemical structure, the properties applicant discloses and claims are necessarily present. (Claims 2 and 7 of Patent '054 refer to the chemical composition of the support and mask, respectively.)</p>
Claim 2	Claim 2 in view of claim 7	Same subject matter. Patent '054 claims in claim 2 the hardened Fe-Ni alloy of which the support frame is made being of the "γ hardened" type whose chemical composition

		<p>comprises, by weight:</p> $40.5\% \leq \text{Ni} + \text{Co} + \text{Cu} \leq 44.5\%$ $0\% \leq \text{Co} \leq 5\%$ $0\% \leq \text{Cu} \leq 3\%$ $1.5\% \leq \text{Ti} \leq 3.5\%$ $0.05\% \leq \text{Al} \leq 1\%$ $\text{C} \leq 0.05\%$ $\text{Si} \leq 0.5\%$ $\text{Mn} \leq 0.5\%$ $\text{S} \leq 0.01\%$ $\text{P} \leq 0.02\%$ <p>Claim 2 fails to claim the tensioned focus mask with specific composition ranges. However, claim 7 claims a tensioned focus mask with specific composition ranges. The examiner notes that a CRT is well known to provide a shadow mask in order to focus and direct the electron beams into a specific section of the phosphor screen and the composition of the materials used for the mask are considered in order to improve structural features of the shadow mask such as strength and thermal expansion. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a CRT with a shadow mask with the purpose of focusing and directing the electron beams into a specific section of the phosphor screen and to provide a structure with improved structure properties such as strength and thermal expansion.</p> <p>Patent '054 also claims in claim 7 the Fe-Ni alloy of which the shadow mask is made comprising a composition by weight of:</p> $32\% \leq \text{Ni} \leq 37\%$ $0\% \leq \text{Co} \leq 5.5\%$ $0 \leq \text{Mn} \leq 0.5\%$ $\text{Si} \leq 0.2\%$ $\text{C} \leq 0.02\%$ $\text{S} \leq 0.01\%$
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		<p style="text-align: center;"><math>P \leq 0.02\%</math></p> <p>While Patent '054 does not disclose the limitation of "<math>0 \leq \text{Nb} + \text{Ta} + \text{Mo} + \text{W} + \text{Zr} &lt; 0.2\%</math>", the examiner notes that the applicant acknowledges that such composition can be 0%, therefore, Patent '054 discloses the limitation of "<math>\text{Nb} + \text{Ta} + \text{Mo} + \text{W} + \text{Zr}</math>" at 0%.</p>
Claim 3	Claim 7	Same subject matter. Patent '054 claims in claim 7 the Fe-Ni alloy of which the shadow mask is made comprising a chemical composition by weight in a range that falls within range claimed in the instant application. While Patent '054 does not disclose the limitation of " $0 \leq \text{Nb} + \text{Ta} + \text{Mo} + \text{W} + \text{Zr} < 0.2\%$ ", the examiner notes that the applicant acknowledges that such composition can be 0%, therefore, Patent '054 discloses the limitation of " $\text{Nb} + \text{Ta} + \text{Mo} + \text{W} + \text{Zr}$ " at 0%.
Claim 4	Claim 7	Same subject matter. Claim 4 is rejected over the reasons stated on the rejection of claim 3 above.
Claim 5	Claim 2 in view of claim 7	<p>Same subject matter. Claim 5 is rejected over the reasons stated on the rejection of claim 2 above.</p> <p>Patent '054 claims in claim 2 the hardened Fe-Ni alloy of which the support frame is made comprising a chemical composition by weight in a range that encloses the range claimed by the instant application. Further, claim 7 of said Patent claims a range that falls within the range claimed by the instant application for the chemical composition of the shadow mask Fe-Ni alloy.</p>
Claim 6	Claim 7	Same subject matter. Claim 6 is rejected over the reasons stated on the rejection of claim 3 above.
Claim 7	Claim 7	Same subject matter. Claim 7 is rejected over the reasons stated on the rejection of claim 3 above.
Claim 8	Claims 3,  4, or  5	<p>Same subject matter. Patent '054 claims the hardened Fe-Ni alloy of which the support frame is made being of the "carbide-hardened" type (see claim 3).</p> <p>Patent '054 claims the Fe-Ni alloy being of the "beryllium-hardened" type (see claim 4).</p> <p>Patent '054 claims the Fe-Ni alloy being of the "solid-solution-</p>



Art Unit: 2879

		hardened" type (see claim 5).
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***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Colón whose telephone number is 703-305-5987. The examiner can normally be reached on Monday thru Friday, from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 703-305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7382 for regular communications and 703-308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
gc

September 25, 2002



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